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ABSTRACT

This report deals with parents who either drop out or continue to cooperate with procedures for identification of problem children. Some suggestions are made regarding measures for identifying dropouts and continuers in mental health agencies. These suggestions are based on data collected over two years of time while families were being recruited during the conduct of a clinical research project involving the identification of young discipline-problem boys. The results of a preliminary report were combined with results of data collected during the project's second year. Dropping out or cooperative behavior by parents was predicted from early reactions to the project, particularly excuses made in contacts with agency staff. (Author/DP)

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CROSS-VALIDATION OF EXCUSES AND COOPERATION IN IDENTIFYING CLINIC DROPOUTS[1]

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ABSTRACT

CROSS-VALIDATION OF EXCUSES AND COOPERATION IN IDENTIFYING CLINIC DROPOUTS[1]

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This report deals with parents who either drop out or continue to cooperate with procedures for identification of problem children. Suggestions are made for identifying dropouts and continuers in mental health agencies based on data collected during an intervention research project in which families with young discipline problem boys were recruited. Results obtained during two years of recruitment were that excuses were related to dropout and cooperation with early procedures predicted continuation.

CROSS-VALIDATION OF EXCUSES AND COOPERATION IN IDENTIFYING CLINIC DROPOUTS[1]

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Dropouts are defined for our purposes as individuals who discontinue contact with mental health agencies at any point after an initial telephone call or interview. These individuals consume large amounts of staff time and agency funds, and also pose a challenge to mental health professionals interested in serving them.

In child guidance clinics, estimates of dropout rates vary from 30% pre-therapy (Levitt, 1958) to 48% in-therapy (Tuckman and Lavell, 1959). No studies of dropout from point of first contact with a clinic have been reported, although prediction from initial contact would be most useful for alerting staff of impending discontinuation.

Investigators have been generally unsuccessful in identifying dropouts. The literature from the 1950's to the mid-60's contains some 35 articles dealing with identification of dropouts. In addition to the problem of definition of the dropout, there are three other major methodological problems that affect general conclusions drawn from a review of this body of literature.

(1) Populations for which figures are presented in various reports are not well defined, thereby limiting the practical application of the findings in any given setting.

(2) Some investigators have developed predictors which appeared to select significant numbers of dropouts from other patients at a given agency, but have failed to take the mental health agency's base rate of dropouts into account.

(3) On cross-validation, the predictive validity of dropout measures has disappeared.

The present report addresses itself to identification of dropouts and continuers from evaluation at a point prior to offer of treatment. As Brandt (1965) has suggested, it seems imperative that early data be collected beginning with the first agency contact, and not after the dropout occurs.

Two studies were conducted within a period of two years during the course of a larger research project. The project involved the identification of discipline problem kindergarten and first-grade boys who were low in compliance and high in deviant behavior rates as a first step toward the evaluation of a behavior modification intervention program. In Study 1, a sample of normal boys was included, while in Study 2 only problem boys were recruited.

A short report of the study conducted during the first year of the project has been published elsewhere (Bernal, M. E., Kreutzer, S. L., North, J. A., Pelc, R. E., and Kreutzer, J. L.,

1973). Briefly, the number of excuses given by mothers as they were asked to set and keep appointments predicted dropout from the identification procedures. Cooperation with each preceding phase of the procedures predicted cooperation with subsequent phases. Encouraged by the possibilities of these two measures for detecting dropouts and continuers, data on excuses and cooperation were again collected during the second year; Study 2 findings will be reported in detail here. However, since the procedures for identifying the discipline problem children differed during the two years, and the results of the two studies have relevance for the interpretation of the predictive validity of excuses and cooperation, data from the first study (Bernal et al, 1973) will be presented for comparison with those of Study 2. In addition, a brief account of the method of Study 1 will be given.

Method

Study 1

Subjects

Subjects of the study were the mothers of 63 discipline problem and normal boys who were in kindergarten. The top of Table 1 summarizes the demographic characteristics of the intact and mother-only families, the number of children per family, and their socioeconomic level according to the Edwards Occupational Grouping Scale (Miller, 1964). In intact families, the father's occupation was scored, while the mother's occupation was scored in

mother-only families. Two independent raters assigning Edwards Scale scores to the 63 families had an agreement of 93%.

Insert Table 1 about here

Procedure

Teachers of 1,017 kindergarten boys in 27 schools in a large metropolitan school district described the boys using the Walker Problem Behavior Identification Checklist or WPBIC (Western Psychological Services, Los Angeles, California). Boys with extreme and average scores on the Acting Out scale were selected for further screening. Their parents received packets containing letters describing the project and soliciting their cooperation in filling out and returning the WPBIC in return for payment of $3. The parent ratings were used to screen out 63 boys who were above and below the average in acting out problems.

Mothers of the 63 boys were contacted by telephone to obtain their cooperation in further evaluation consisting of a series of six home observations. All mothers were offered payment of $15 upon completion of the observations. Those who expressed interest were asked to set an appointment for a home visit by staff for further discussion of the observations. During the home visit, mothers were asked to verbally agree to the observation series. No offer of treatment was made by staff.

There were six 30-minute observations which had to take place at the same time of day and be completed within three

weeks. The identification process was completed when all observations were done.

Summary of identification procedures. In summary, requests made of the mothers may be divided into three phases:

Phase 1: Telephone contact. Mothers were asked to set an appointment for the home visit.

Phase 2: Home visit. Parents were asked to be present and on time for the home visit, and to agree to the evaluation consisting of a set of observations.

Phase 3: Home observations. The entire family was asked to be present and on time for each of six home observations.

During each of these phases, staff tried to enlist cooperation via telephone. They did not keep a record of the total number of calls. Excuses given during these calls varied in number among the mothers, but if several were given during one call they were each counted.

Dependent variables. An excuse was defined as a verbal effort to avoid agreement with a request at the point when a request was made. Some examples of excuses were: "I have to talk with my husband," "I'm to busy now," and "I'm looking for a new job."

During each of ten Phase 1 telephone calls to ten of the mothers, a second staff member listened to the call while the first member discussed arrangements for beginning the home observations. Both members independently wrote down the ex-

cuses given by each mother, and their agreement on number of excuses given was 100%. Mothers were not told that a second staff member was listening; these conversations were recorded on paper, and staff shared the recorded information. Mothers were assured that all information would be kept confidential within the project.

Data were kept for each family on completion of each of the three phases of the identification process, but no telephone calls were monitored after Phase 1.

Study 2

Subjects

Subjects were the mothers of 50 acting-out kindergarten and first-grade boys. Their demographic characteristics are summarized in Table 1. Raters had 98% agreement on the assignment of Edwards scores, done in the same manner as in Study 1.

Procedure

A different procedure for identification of discipline problem boys was used in this study in order to preserve staff time and effort. Letters were sent out from 22 cooperating schools addressed to the parents of all boys in the kindergarten and first grades.

The letters listed the following behaviors: fails to obey, fights, talks back, interrupts, teases, damages things, cries and fusses. Parents were told that if their boy displayed two or more of these behaviors to an excessive degree at home, and they wished to obtain help, they could return an enclosed family information form. An introductory letter from the school district office was also enclosed. A total of 1,857 letters were mailed, 154 sets of parents returned the information forms and 81 met the following preliminary selection criteria: the designated problem boys lived with their immediate families only, i.e., there were no relatives or friends in the home, there were no mentally or physically handicapped children, no more than four children in the family, and they were permanent residents with no plans to move out of the area. Both intact and single parent families were allowed to participate.

Contact with parents for screening and group meetings. During the first staff-initiated telephone call to the families, the goals of the project and requirements for participation in the parent training were communicated. When a family was intact, screening was conducted to assure that both parents were concerned about the child and were willing and able to set two appointments per week while they received help. Finally, mothers were told that if their marriage was clearly in difficulty as indicated by previous separation or threats of divorce, we

would not work with them because of the evident complications.

In almost all cases, this call reached mothers, and, while there was more communication with fathers in this study than in the previous one, mothers again were the most accessible; therefore, data for mothers will be reported as before. The contribution of fathers and other family members could not be ascertained.

Prior to termination of the phone call, mothers were invited to a group meeting for the purpose of providing a more thorough briefing on the aims and procedures of the project. If the mother verbally agreed to attend this meeting with her husband, or did so on later contact, she was considered to have completed this phase. Seventy-nine of the 81 mothers were reached by telephone, and 50 met criteria. Excuses were counted up to the point of verbal agreement or dropout.

Group meeting. These meetings were set on weekday evenings. In addition to answering questions, staff specifically described the contract into which parents were asked to enter: they would be provided with a free-of-charge teaching service carried out mostly in their homes and designed to help them manage their child more effectively in exchange for their cooperation in allowing the collection of observation data in the home and in their boy's classroom, and continued participation in a twice per year set of observations over two years of time. When each set of evaluations or observations was completed they would be paid $10.

The next step after the meeting was completion of the baseline observations; this evaluation would provide the parents information on the degree of the child's deviance and allow them to make a decision regarding their need for help. If the parents agreed to these conditions and wanted to continue, they were told they would be called within a few days for scheduling of observations.

Parents who did not show up for an appointed meeting either called to change the appointment, or staff called them to ask if they wanted to make another appointment. No more than three appointments were set per family; if parents did not show for any of the three, they were sent a standard letter advising them that if they wanted help at a later date they could call. In the case of two mothers, when staff called to ask about another appointment, the mothers gave several excuses but would not set an appointment. Staff confronted them with the apparent fact that they didn't want to participate, and both mothers agreed. Excuses were counted beginning with failure to keep the first scheduled appointment up to the point where a parent kept the appointment, dropped out, or was discontinued.

The observations. A series of four home observations of 30 minutes' duration, to be completed within two weeks, were scheduled via telephone. All details of observation were the same as for Study 1.

Typically, when mothers called to cancel an appointment, staff willingly rescheduled a new one. The number of cancellations allowed was not limited, except that mothers were told the observations had to be completed within two weeks, or else collection of the set of four had to begin over again. No mothers chose this alternative; all who completed did so within two weeks. When a family did not show for the first observation, staff called the mother and tried to make another appointment. At this point, some mothers admitted they didn't want to go on, and they were dropped. However, in the one case with two no shows, no further calls were made, and the parents were sent a letter letting them know they could initiate further contact. Each time the mother was called to set observations one through four, excuses were counted.

The home visit. When the home observations were completed, mothers were called to set an appointment in their homes so that the results of the observations could be communicated to them and the possibility of intervention could be discussed. Excuses were counted between the point of the first phone call and the time when the appointment was kept or dropout occurred. The identification process was completed when the home visit was done.

Summary of identification prodecures. In summary, the four phases were as follows:

Phase 1. Telephone contact for initial screening of families. Mothers were asked to set an appointment for the group meeting.

Phase 2. Group meeting. Both parents had to be present at the project office and to agree to the conditions for participation in treatment.

Phase 3. Home observations.

Phase 4. Home Visit.

Dependent variables. Procedures for collection of excuses and cooperation data were revised and better specified so as to generate more reliable information about the usefulness of these measures. Staff wrote down excuses given, and two independent naive scorers sorted them according to the definition of an excuse. The agreement was 96%. Changes in the manner in which subjects were dropped have already been described by phase. Cooperation with each phase was recorded as before.

While in Study 1 staff made no effort to avoid communicating to mothers that a reason for cancellation or no show was expected or wanted, throughout all phases of this study staff tried to avoid placing mothers in a position where they might have felt an excuse was being requested. For instance, when staff called to schedule another appointment, no mention was made of the fact the family had not kept the previous one.

Results

Excuses and dropout. Table 2 shows that, as compared with Study 1, the mean excuse rates for Study 2 did not increase with each new phase, and the overall number of excuses given by both completing and dropout mothers was markedly lower.

To determine overall differences in excuses given by continuers and dropouts for each study, the data were cast in 2 x 2 tables with the number of mothers giving zero and one or more excuses as one variable and continuers and dropouts as the other variable. Chi square analysis of the Study 1 data revealed that more dropouts than continuers gave excuses ($\chi^2 = 6.76$, $p < .05$). The same analysis of Study 2 data up to Phase 3 failed to show any difference between continuers and dropouts. Similar tables were prepared for each phase of each study, and the Fisher exact probability test (Siegel, 1956) was computed for the tables. In Study 1, significantly more dropouts than continuers gave excuses (Phase 1, $p < .001$; Phase 2, $p < .05$; Phase 3, $p < .01$). In Study 2, significantly more dropouts than continuers gave excuses at Phase 1 ($p < .001$) and Phase 3 ($p < .001$), but no differences were found for Phase 2. The number of excuses given by continuers and dropouts in Study 2 varied according to the phase which subjects entered.

Insert Table 2 about here

The relationship between completion of each phase and excuses given during the phase was determined by use of the phi coefficient.

Data were arranged in 2 x 2 tables with number of mothers completing and not completing each phase as one variable and the dichotomy of no excuses versus any number of excuses as the other variable. Table 3 presents the findings for both studies. In Study 1, excuses given during Phase 1 were highly positively related to dropout, and a moderate degree of relationship was obtained for Phases 2 and 3. However, excuses for Study 2 were related to dropout during Phases 1 and 3 only.

Insert Table 3 about here

Dropout rates. A comparison of the number of dropouts and continuers in the two studies was done by phase. In Phase 1, there were significantly more dropouts than continuers in Study 1 ($\chi^2 = 7.05$, $p < .01$) than in Study 2. However, the reverse situation occurred at Phase 2, when the dropouts were greater for Study 2 ($\chi^2 = 8.21$, $p < .01$). Finally, at Phase 3 no difference in dropout frequency was observed between studies ($\chi^2 = 1.26$, $p > .20$). The overall dropout rates did not differ for the two studies ($\chi^2 = 1.21$, $p < .20$), although 54% dropped out of Study 2 by the end of Phase 3 as compared with 40% in Study 1.

Prediction of completion of the identification process. Another question that was asked involved the extent to which completion of one phase predicted completion of subsequent ones. For example, what would be the probability of completing the whole process given completion of the first phase? Table 4 displays the conditional probabilities for completion of subsequent phases given completion of previous ones for both studies.

In Study 1, Phase 1 completion almost perfectly predicted cooperation with Phase 2, and the likelihood of completion of the identification process given Phase 1 was .74, i.e., Phase 1 completion correctly predicted completion of Phase 3 in about three-fourths of the cases. For Study 2, however, the best early prediction of completion was based on cooperation with Phase 2; once mothers attended the group meeting, the probability was about .67 that they would complete the identification process. Cooperation with Phase 1 correctly predicted completion in only about one-half of the cases.

Insert Table 4 about here

Demographic characteristics and phase completion. In Study 1, for both intact and mother-only families, higher socioeconomic levels were associated with completion ($\chi^2 = 4.36$, df = 1, $p < .05$). However, this association was mainly due to the intact family data ($\chi^2 = 5.10$, df = 1, $p < .05$) since the same analysis for mother-only families failed to reach significance. No significant asso-

ciations were found between phase completion or completion of the whole identification process and any demographic variables in Study 2. Selection criteria including the limitation of family size probably accounted to some extent for the higher socioeconomic level and greater homogeneity of the second year's sample.

Discussion

In Study 1, an apparently simple relationship was found: mothers who gave excuses were those who were likely to drop out, and this excuse behavior was consistent at each stage of the identification process. New procedures instituted for Study 2 yielded a more complicated relationship between excuses and dropout, and this discussion will focus upon these differences in procedures in an attempt to understand the results.

One of the most obvious differences between the studies was the manner in which families were recruited. Staff attempted to solicit the participation of mothers for each phase of Study 1, and the mothers had not asked for help. In contrast, Study 2 mothers indicated a desire for help out of concern for their boys. At Phase 1, the former group had a greater tendency to give excuses, and more of them dropped out than the latter group. It seemed reasonable that mothers who did not ask for help would give more excuses in an effort to avoid recruitment, especially when staff persisted in trying to gain their cooperation. They would also be more likely to drop out right at the outset, as the re-

sults confirmed. On the other hand, Study 2 mothers were less likely to try to avoid the offer of help which they initiated, and most agreed to attend a group meeting when invited. Those few mothers who excused themselves from the offer of help were dropped without further effort to recruit them. The relationship between excuses and dropout was clearcut at this stage.

Then the next stage of involvement arrived: Study 1 mothers were asked to receive a visitor in their homes, while Study 2 mothers had to be present for an office appointment. Those few mothers in the former group who gave excuses were the ones who dropped out, but almost all the mothers kept the appointment. Furthermore, the dropout rate was much higher for Study 2 mothers, but the excuse rates for the two groups were comparable. These results were perplexing: the presumably more motivated mothers of Study 2 should have given less excuses and more of them should have kept appointments as compared to Study 1 mothers. It seemed possible that the fact that Study 2 mothers had to travel to keep the office appointment, a task that required finding a baby sitter or getting the family prepared to go out, resulted in the higher dropout. Also, the failure to confirm the relationship between excuses and dropout at this phase could have resulted because those mothers who gave excuses tended to do so in the process of calling to change an appointment before it took place. Perhaps one lesson to be learned from the results of this phase (and per-

haps Phase 4 of Study 2) is that mothers are more likely to keep home than office appointments, irrespective of their motives. However, the dropout mothers of Study 2 may have lost interest due to reduction of their boys' problems, or perhaps these problems were less intense than those of continuing mothers' children.

At Phase 3, mothers in both studies were asked to be present for a series of home observations, and despite the variations in procedure between studies, the relationship between excuses and dropout again was evident in both studies. Motivation to receive help should have decreased the dropout rate of Study 2 mothers as compared to Study 1, but no such differences in dropout were found. Perhaps Study 2 mothers were disappointed with the time and demands that delayed the delivery of service.

Finally, only one mother dropped out of Study 2 at the point where staff offered to visit the home to communicate the observation results. Three out of the total of four excuses given by the continuing mothers were made when they called to reschedule appointments. Apparently, once they had been so highly selected for cooperation they were very likely to receive a visitor.

Another finding was that the degree of relationship between excuses and dropout varied depending upon the staff's expenditure of effort in soliciting parental cooperation. When a standard procedure for recruiting mothers was used which incorporated the knowledge that those who gave excuses were more likely to drop

out, the relationship was significant but moderate and not as high as in Phase 1 of Study 1.

The best predictor of completion of the identification process of Study 2 was not, as Study 1 suggested, verbal agreement to engage in Phase 2. Rather, completion of a group meeting at the office best predicted completion of the whole process. Apparently, an office visit presented a more stringent test of motivation to Study 2 mothers than did mere verbal agreement to the office appointment.

Records such as those kept in these studies could serve as a basis for planning and evaluating service delivery systems. For example, in the current project, one way of enlarging the pool of identified problem boys is to repeat the procedures of Study 2, but send out more letters via the school system. Prior knowledge of return and continuation rates for this population would indicate that 50 families meeting the criteria of Study 2 could be acquired by sending out letters to 1,800 families, and that 22 families would complete the identification process. To double the number of identified problem boys, letters would be sent to 3,600 families. Similarly, such records could permit evaluation of the effects of changing Phase 2 from an office visit to a home visit. In other words, when operating procedures are well specified and their relative contribution to the cooperation of the population for whom they are designed is known, assessment of procedural changes is possible.

Addition of measures of client satisfaction and parent perception of the severity and extent of the child's problems would have provided a better understanding of the dropout data. Inclusion of such measures is highly recommended for evaluation of services.

Collection of data on excuses may be useful in identifying potential dropouts, but further assessment of this measure in actual clinic settings seems advisable since it very likely is sensitive to the requirements of steps in intake and service delivery processes. Furthermore, generalization of the results of this study to clinic situations in which clients pay for services may be unwarranted. Results presented here would suggest that investigation of excuses and cooperation as predictors of dropout and continuation in a real clinic setting could be an interesting and potentially fruitful endeavor.

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FOOTNOTE

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TABLE 1

Demographic Characteristics of Intact and Mother-only Families

Demographic variable	Intact families	Mother-only families	All families
	Study 1		
Number of families	40	23	63
Number of children	118	84	202
Socioeconomic level[a]			
Median	4.0	6.0	4.0
Mean	3.3	4.8	3.8
	Study 2		
Number of families	32	18	50
Number of children	77	43	120
Socioeconomic level			
Median	2.0	4.5	3.0
Mean	2.6	4.3	3.2

[a]Scores were based on Edwards Occupational Grouping Scale.

TABLE 2

Excuses, Continuation,

and Dropout Rates

Study 1

	Phase 1			Phase 2			Phase 3[a]			Phase 4		
	Excuses		No. mothers	Excuses		No. mothers	Excuses		No. mothers	Excuses		No. mothers
Group	N	M		N	M		N	M		N	M	
Continuers	3	.06	47	16	.36	45	24	.69	35			
Dropouts	41	2.56	16	6	3.00	2	32	4.57	7			
Cumulative dropouts			25%			29%			40%			

Study 2

Continuers	3	.07	46	11	.33	33	9	.39	23	4	.18	22
Dropouts	4	1.00	4	3	.23	13	17	1.70	10	0	--	1
Cumulative dropouts			8%			34%			54%			56%

[a]Three families moved away before entering Phase 3 and are not counted in Phase 3.

TABLE 3

Phi Coefficients Relating Dropout and Excuses

Study 1							
Phase 1		Phase 2		Phase 3		Phase 4	
N	Ø	N	Ø	N	Ø	N	Ø
63	.86**	47	.47*	42	.41*		
Study 2							
50	.56**	46	-.10	33	.46*	23	.08

*p .01

**p .001

TABLE 4

Conditional Probabilities for

Completion of Subsequent Phases

Given completion of phase	Likelihood of completion of phase		
	Study 1		
	2	3	4
1	.96	.74	---
2		.78	---
	Study 2		
1	.72	.48	.47
2		.70	.67
3			.96